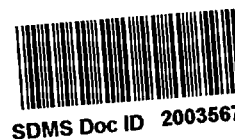


COMPREHENSIVE REMEDIAL RESPONSE

FACT SHEET

INSULAR TERRITORIES



0000046

This is a Comprehensive Fact Sheet for the Insular Territories in Region 9: Guam, American Samoa, the Northern Mariana Islands, and the Trust Territory of the Pacific Islands. EPA's Interim Priority List includes one "highest priority" site from each of these Territories: Ordot Landfill (Guam), Taputimu Farm (American Samoa), PCB Warehouse (Northern Mariana Islands), and PCB Wastes (Trust Territory of the Pacific Islands).

I. BACKGROUND

The Insular Territories comprise a total land area of approximately 990 square miles with a population of about 262,000 persons. More than 2,000 islands are spread out over an area in excess of 7 million square miles. Only a small percentage of the land area is permanently inhabited. The population is therefore much more confined and dense than would be expected, based only on land area and total population.

The entire Insular Territories area is subject to climatological patterns vastly different from that of the mainland. Torrential rains and high winds, including typhoons, are not uncommon. The rainfall on some of the islands exceeds 200 inches per year. These climatic conditions require special procedures to protect the public health and the environment from stored hazardous wastes. Generally, the financial resources, and topological and morphological conditions necessary for construction of safe disposal facilities in these areas are not available.

The small land area and dense population of most of the inhabited islands combined with the unique topological and subsurface configuration appear to make safe on-island hazardous waste siting virtually impossible. The Insular Territories' natural resources are limited; land and fresh water are valued commodities. The accidental release of hazardous wastes through human error or climatological event may contaminate not only the land itself and the potable water supplies, including sole source aquifers, but may also contaminate the marine resources which supply the principal food source for many of the islands. Such contamination can have implications far beyond what would be expected in a mainland situation. The lack of Class I Waste Disposal

Facilities on the islands, the apparent lack of physical resources to site Class I facilities, the lack of technical expertise to manage such facilities if they did exist, combined with the highly corrosive climate, appear to make long term on-island storage or disposal of hazardous waste materials an unacceptable alternative.

A. Ordot Landfill, Guam

The Ordot Landfill has been in use for over forty years. For most of its operational life Ordot has been an open dump and there are no accurate records of what was disposed of at the landfill. Some of the wastes are containerized and stored in drums. The current landfill site occupies 47 acres and plans call for possible expansion to a total of 74 acres. The site overlies the sole source aquifer for the island. The Territory is currently beginning to monitor the surface water surrounding the site. No groundwater monitoring has been undertaken. Ordot has been named as the top priority waste site on Guam.

B. Taputimu Farm, American Samoa

The island is small, approximately 25 miles by 3 miles, with a population of 32,000. The site is part of an agricultural experimental farm owned by the Territory and has been named by the Governor's designee as the "priority hazardous waste site" on American Samoa. The site consists of a warehouse, which has been used in excess of 10 years for the storage of unwanted, unused chemicals and pesticides. Many of the containers are leaking and have illegible markings or no labels. Known chemicals include tetra chlor (2,4,5,T), dieldrin, methoxychlor, sodium pentachlorophenate. It is estimated that approximately 2000 pounds of hazardous wastes are on site. In addition to this, approximately 20 barrels of PCB waste fluid are on site. The building regularly floods and the contents are washed downslope to a public beach. Contact with human beings, marine resources, and drinking water is likely.

C. PCB Warehouse, Northern Mariana Islands

The PCB Warehouse is a temporary shelter built as an interim storage facility for approximately 1400 gallons of PCB transformer fluid (concentration up to 25,000 ppm PCB). The structure was built as a first step to protect people and the environment from contamination by PCB's. The fluid is currently stored awaiting shipment to an off-island RCRA permitted PCB disposal site. The storage site is adjacent to the Philippine Sea, which makes long term storage unsafe. A similiar nearby facility, which housed waste chemicals, was destroyed

by typhoon Dinah in 1980. The potential for PCB contamination of drinking water and marine food resources upon which the islands' inhabitants are dependent is high in the event of another such incident. The site has been designated as the Commonwealth's "highest priority site" by the Governor.

D. PCB Wastes, Trust Territory of the Pacific Islands

These islands all contain areas of storage for PCB transformers and PCB contaminated transformers. In excess of 2000 gallons of waste fluid are stored. The storage sites are unprotected and potentially may contaminate the water (ground and surface), which is used for drinking. Contamination of the marine resources used for food supply can also be expected. Some of these sites are suspected of having already contaminated the surrounding areas. This PCB waste problem has been designated as the Territory's "highest priority site" by the Acting Deputy High Commissioner of the Territories.

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (§104(d)(4)) provides that under certain circumstances non-contiguous facilities can be treated as one facility. We feel the specifics of these individual locations in the Trust Territories satisfy the cited circumstances.

II. ENFORCEMENT STATUS

A. Ordot Landfill, Guam

Preliminary investigation has determined that the Territorial Government is solely responsible for the ownership and operation of the site. In addition, there appear to be no responsible private parties, such as generators or transporters, in existence. In order to confirm this information, a RCRA §3007 letter addressing these issues was sent to the State on December 10, 1981. There is no history of federal enforcement and none is planned at this time. If the State response does not reveal any new information on responsible parties, the investigation will be closed.

B. Taputimu Farm, American Samoa

Preliminary investigation has determined that the Territorial Government is solely responsible for the ownership and operation of the site. In addition, there appear to be no responsible private parties,

such as generators or transporters, in existence. In order to confirm this information, a RCRA §3007 letter addressing these issues was sent to the Territory on December 10, 1981. There is no history of federal enforcement and none is planned at this time. If the Territory's response does not reveal any new information on responsible parties, the investigation will be closed.

C. PCB Warehouse, Northern Mariana Islands

Preliminary investigation has determined that the Territorial Government is solely responsible for the ownership and operation of the site. In addition, there appear to be no responsible private parties, such as generators or transporters, in existence. In order to confirm this information, a RCRA §3007 letter addressing these issues was sent to the Commonwealth on December 10, 1981. There is no history of federal enforcement and none is planned at this time. If the Commonwealth response does not reveal any new information or responsible parties, the investigation will be closed.

D. PCB Waste, Trust Territory of the Pacific Islands

According to information obtained to date, including TTPI's response to our RCRA §3007 letter of December 10, 1981, the Territorial Government is solely responsible for the ownership and operation of the site(s). In addition, there are no responsible private parties in existence. There is no history of federal enforcement and none is planned. The investigation of this site is closed.

III. REQUIRED ACTIONS

We request that funding be provided for the A & E Zone Contractor to develop two simple Comprehensive Action Plans covering the four Insular Territories' sites. Because of the islands' distance from the mainland and the common problem of containerized waste, we recommend that the four sites be treated together for determining a solution to this particular problem.

In addition, the characterization of the landfill portion (the non-containerized waste problem) at the Ordot Landfill must be accomplished. We recommend that it be treated as a separate action, since Ordot also includes a potential groundwater problem due to the mixing of hazardous and solid waste in the landfill. Two separate plans are also recommended because the solution for the containerized waste problem can probably be accelerated on a faster time schedule since the amount of field work required may be much more limited than that for the Ordot problem.

The required tasks for these two actions are outlined below.

A. Action to Remedy Containerized Waste Problem

1. Compilation & Review of Existing Data & Identification of Necessary Field Work

- o Existing data on each of the sites is located in various Territorial Government files. Only a limited amount of data is available in the regional office. In order to develop thorough and comprehensive remedial alternatives, this data needs to be compiled, reviewed, and the background data needs to be made available to EPA staff. It is anticipated that even the available data (e.g. sample analyses, investigation reports) located in the islands may be very scarce. Once the data is compiled, an evaluation of the adequacy of the information and a recommendation for follow-up field action will need to be made.

2. Completion of Necessary Field Work & Development of Remedial Alternatives

- o It appears, based on currently available data, that the field investigation work should include the following activities:
 - Quantification of wastes
 - Identification of unknown potentially hazardous waste materials, which are currently stored in leaking and/or unlabeled containers
 - Identification and quantification of the presence or absence of contaminated soil needing removal
- o The exact level of effort needed for field work cannot be precisely defined, until the compilation and evaluation of the existing data is completed. Based on currently available data, the regional office projects that sampling of containerized wastes will be required at Taputimu Farm and the Ordot Landfill in Guam. No sampling of containerized wastes appears to be required at the PCB Warehouse in the Northern Mariana Islands or in the Trust Territories, because of sampling already completed. If this previous sampling is determined inadequate, an estimate for the necessary additional work will be submitted after the first step is completed.
- o Once the limited amount of field work is completed, we recommend that remedial alternatives for the containerized waste problem be developed on an

accelerated time schedule. Among the alternatives considered, the feasibility of off-island disposal of all the containerized hazardous waste should be thoroughly analyzed especially since there are no civilian Class I storage or disposal facilities in the Insular Territories.

3. Selection of Most Cost-Effective Remedial Alternative & Completion of Remedial Solution

- o It is anticipated by the regional office that the selection and execution of the most cost-effective solution should be fairly straight forward, since this containerized waste problem deals with a relatively small amount of hazardous waste. Once the remedial alternatives have been developed, a cost-effective remedial solution will be selected and a cost estimate for its implementation will be submitted for funding.

B. Action to Characterize Problem at Ordot Landfill

1. Compilation & Review of Existing Data

- o The existing data on past activities undertaken at Ordot Landfill also needs to be compiled. In particular, attention needs to be directed towards the available information on potential surface and ground water contamination. Before extensive effort is put into further investigation and development of remedial alternatives for the remaining landfill portion of Ordot, a determination needs to be made on the seriousness of the groundwater contamination threat and the possible courses of actions that should be taken.

2. Completion of Full Field Investigation

- o Based on currently available data in the regional office, it is anticipated that a more thorough Full Field Investigation will be required at Ordot Landfill, than the field work for the containerized waste problem. In addition to surface water monitoring now underway, it is projected that monitoring and sampling of groundwater will be needed. However, an accurate cost estimate for the Full Field Investigation work cannot be generated, until more information is available after the completion of the first step.

C. Summary of Costs for Required Actions

1. Action to Remedy Containerized Waste Problems

- o Compilation & Review of Existing Data & Identification of Necessary Field Work \$15,000
- o Completion of Necessary Field Work & Development of Remedial Alternatives
 - Sampling & Quantification of Wastes 23,000
 - Development of Remedial Alternatives 7,000
- CURRENT ESTIMATED COSTS \$45,000

2. Action to Characterize Problem at Ordot Landfill

- o Compilation & Review of Existing Data \$10,000
- CURRENT ESTIMATED COSTS \$10,000

3. Total Costs (Requested at This Time) for Required Actions in the Insular Territories

- o Please note that once more information has been gathered and the appropriate steps have been more specifically defined, follow-up funding requests will be submitted to Headquarters for approval.

TOTAL ESTIMATED COSTS

\$55,000 ^{\$75,000}

IV. NON FEDERAL SHARE

- o Title V of the Omnibus Territories Act (PL 95-134, Oct 15, 1977) enables the federal government to waive normal grant matching requirements for the Insular Territories. A legal opinion by Regional Counsel (Attached) indicates that the Regional Administrator may waive the State cost-sharing required by CERCLA. Because the primary economic base of these areas is from the federal government, the State match would, to a large extent, simply be a match from different federal funding sources. Therefore, the Regional Office intends to waive the cost sharing provisions of CERCLA in conformance with the Title V of the Omnibus Territories Act.